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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,106

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Hiroshi Dairiki

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EXAMINER

SULLIVAN, DANIELLE D

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

06/21/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/523,106	DAIRIKI ET AL.	
	Examiner	Art Unit	
	DANIELLE SULLIVAN	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/21/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-3 and 5 are pending examination.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/21/2010 entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. (US 5,981,433) in view of Suzuki (US 2003/0036481) Nakayama et al. (US 6,774,087).

Applicant's Invention

Applicant claims a granulated composition comprising a pesticidal ingredient selected from cyflufenamid, triflumizole, etc., potassium chloride, sodium lignosulfonate

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with a degree of sulfonation of at least 2 and a sulfate or phosphate salt of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt. Claim 2 limits the amount of lignosulfonate surfactant to 1-15% and the salt of the polyoxyalkylene arylphenyl ether to 0.01-15%. Claim 5 specifies the active comprises trifumizole.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Bramati et al. teach a dispersing agent for plant protection agrochemicals such as pesticidal dispersible granules, comprising (a) a lignosulfonate admixed with (b) sulfated triphenyl phenols (abstract). Preferably, a combination of REAX 88B or Polyfon O (3.8 sulfonation) and a tristyrylethoxylated sulfated ammonium salt (Soprophor 4D384) (column 3, lines 10-17).

Bramati et al. teach the dispersing agent wherein the preferred weight ratio of lignosulfonate (a)/polyoxyalkylene arylphenyl ether (b) is on the order 95/5 to 50/50 (column 2, lines 36-42). The pesticidal formulations comprise 0.01-90% of the plant-protection active agent and 0.1- 20% of the dispersing agent (column 3, lines 30-43). Assuming a composition comprises 10% of the dispersing agent and the ratio of (a) to (b) is 95/5, the formulation comprises 9.5% lignosulfonate and 0.5% polyoxyalkylene arylphenyl ether which is encompassed by the ranges of (a) 1-15% and (b) 0.01 to 15%.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Bramati et al. do not teach the presence of potassium chloride. It is for this reason that Suzuki is joined.

Suzuki teaches granular water-dispersible agents wherein the dispersing agents are selected from tristyrylphenyl ether or distyrylphenyl ether added to polyoxyethylene, tristyrylphenyl ether phosphate or distyrylphenyl ether sulfate added to polyoxyethylene and sodium ligninsulfonate, wherein two or more of the compounds may be used in combination as the dispersing agent [0032]. Carriers consist of minerals selected from an inorganic salt such as potassium chloride [0034]. Examples comprising 100g triflumizole, 140g sodium ligninsulfonate and 237.5 potassium chloride are disclosed [0044].

Bramati et al. teach the particular species selected from polyoxyethylene tristyrylphenyl ether sulfate salt, however, polyoxyethylene tristyrylphenyl ether phosphate salts are not taught. It is for this reason that Nakayama et al. is joined.

Nakayama et al. teaches herbicidal composition comprising sulfate-type and phosphate-type surfactants and their salts. The liquid herbicide comprises at least one anionic surfactant selected from sulfate-type surfactants and phosphate-type surfactants (column 2, lines 51-53). The surfactants include polyoxyethylene (mono, di or tri)styrylphenyl ether sulfates, polyoxyethylene (mono, di or tri)styrylphenyl ethers phosphates and their salts (column 1, lines 51-65; column 2, lines 24-37 and 56-65). Hence there is a teaching of equivalence between the sulfate salt and the phosphate salt in these polyoxyethylene (mono, di or tri)styrylphenyl ether anionic surfactants .

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al., Suzuki, and Nakayama et al. to utilize tristerylphenyl ether phosphates and their salts. One would have been motivated to utilize these phosphate surfactants because Nakayama et al. teach that they are anionic surfactants and one of ordinary skill would have been led to substitute polyoxyethylene styrylphenylether sulfates with polyoxyethylene styrylphenylether phosphates and their salts.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al. Suzuki and Nakayama et al. to utilize tristerylphenyl ether phosphates and their salts. One would have been motivated to utilize these phosphate surfactants because Nakayama et al. teach that they are anionic surfactants and one of ordinary skill would have been led to substitute polyoxyethylene styrylphenylether sulfates with polyoxyethylene styrylphenylether phosphates and their salts.

Response to Arguments

Applicant's arguments filed 5/21/2010 have been fully considered but they are not persuasive.

Applicants argue that Bramati neither refers to nor suggests a degree of sulfonation of lignosulfonates. The Examiner is not convinced by this argument

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because Bramati discloses examples comprising REAX 88B which inherently has a degree of sulfonation greater than 2.

Applicants argue that there is no motivation to combine Suzuki because Suzuki teaches that potassium chloride is combined at the dry milling process stage as a carrier and not as a dispersing agent. The Examiner is not convinced by this argument because claim 1 does not limit potassium chloride to a dispersing agent. Furthermore, Suzuki teaches that adding potassium chloride aids in the formulation of water dispersible granules. It is well known that applying a known technique to a known method or product which yields predictable results is prima facie obvious in view of KSR International Co. v. Teleflex Inc., 550 U.S. 82 USPQ2d at 1396, 2006. Hence, adding potassium chloride, as taught by Suzuki, to the water dispersible granule of Bramati is prima facie obvious.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. in view of Suzuki and Nakayama et al. and view of Suzuki et al. (US 5,980,926).

Applicant's Invention

Applicant claims a granulated composition comprising a pesticidal ingredient, a lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or phosphate salt of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene trisylphenyl ether sulfate salt and polyoxyethylene tristylphenyl ether phosphate salt. Claim 3 specifies the active is cyflufenamid.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

The teachings of Bramati et al., Suzuki and Nakayama et al. are described in above 103 rejection.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Bramati et al., Suzuki and Nakayama et al. do not teach the particular pesticides cyflufenamid and triflumizole. It is for this reason that Suzuki et al. is joined.

Suzuki et al. teach water dispersible granules suitable for preparing the formulations of pesticides with excellent dispersibility (abstract, column 2, lines 10-16). The pesticidal components preferably include triflumizole (column 2, lines 45-47. Example 1), cyflufenamid (structure of formula [1], column 3, Table 1, No. 1, Example 4) or a combination of the two (column 2, line 39-column 4, line 25). Additionally, the granule is combined at the wet milling process with tristeryl phenyl ether added thereon with polyoxyethylene (column 4, lines 26-34). Also, a dispersion aid, sodium ligonsulfonate, was added at the time of wet milling (column 4, lines 35-41).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al., Suzuki, Nakayama et al. and Suzuki et al. to utilize triflumizole and cyflufenamid. One would have been motivated to

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utilize triflumizole and cyflufenamid because Suzuki et al. teach that they are preferably formulated into water dispersible granules and provide excellent dispersibility. One of ordinary skill would have been motivated to formulate the cyflufenamid with the dispersing agent disclosed by Bramati et al. because they are plant-protecting active ingredients which can be substituted in the formulation. Since these actives are known to be formulated as water dispersible granules, one would have been motivated to combined the actives with the dispersing aid in order obtain a highly dispersible granular pesticide.

Response to Amendment/ Declaration

The declaration under 37 CFR 1.132 filed 5/21/2010 is insufficient to overcome the rejection of claims 1-3 and 5 based upon Bramati et al. as set forth in the last Office action because: The showing of unexpected results are not in the form of a side by side with the teachings of Bramati et al.. The showing compares the difference between sodium lignosulfonate and calcium lignosulfonate. However, Bramati et al. teach sodium lignosulfonate and only lacks in teaching the addition of potassium chloride. The burden is on the applicant to establish that the addition of potassium chloride results in unexpected results in comparison to the teachings of Bramati et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616